Introduction to the Internet Psychology

MTAT.03.248

E-kursuse materjalid

Kätlin Konstabel

Tartu Ülikool, 2010

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Eesti tuleviku heaks

Introduction:

Overview of the main differences between computer mediated (CMC) and face-to-face (FTF) communication

Diminution of physical appearance and sensations

Because most of the Internet social interaction is text-based, it lacks the first, physical impression which normally sets the course for the rest of the interaction (Fiske & Taylor, 1991). This is particularly appealing for those who either are unattractive or perceive themselves as such and are therefore afraid of social disadvantages and discrimination that could happen in FTF interactions. In these cases people present themselves in a positive way and hope that when the interaction progresses to a FTF one, their unattractive physical characteristics are not relevant to others anymore.

Although many people with low physical self-esteem try to avoid FTF communication and prefer online anonymous interaction, the same holds true for extremely attractive people as well - they could be afraid that the only reason people want to communicate with them is their appearance (Ben-Ze'ev, 2005).

Important part of the Internet interactions is the absence of seeing gestures, facial expressions, posture and hearing (changes in) voice tone - which irl often occur instantly, unwillingly and thus reveal a lot about person's character and emotions.Verbal expressions of feelings and the usage of emoticons, on the contrary, can be efficiently controlled.

Even if audio-video technology allows us to perceive some of the so-called body language, there still are unavoidable limitations, like

1) often the combination of facial, vocal, bodily and verbal cues is crucial;

2) using web cameras, internet-phoning and such (at least outside work environment) is voluntary – if one wants to remain anonymous or doesn't want to show his/hear true reactions and physical self, there are always possibilities to find excuses for not using them;

3) even with the best of technology there is (at least so far) no possibility to hug, kiss, shake hands, pat on the back etc.

Greater anonymity

This feature is directly related to the previous one – even if e-mail addresses, names, nicknames, even computer IPs reveal a lot about the identity of a person, many sources of information that we might (consciously or unconciously) use in our interpretation remain unknown in CMC. Even more, people can often choose fake names, falsify or hide other personal and identifying details (e.g. physical, demographic ones).

Anonymity encourages people to express themselves more freely and sincerely, since they are not subject to the usual social norms and rules (Turkle, 1995). It's very similar to the“strangers-on-a-train“ phenomenon (Rubin, 1975) – two strange people meeting on the train may feel safe to open up to one another just because they are sure they are unlikely to meet again. Joinson’s study (2001) showed that a pair of students working on an academic task over the Internet revealed more personal information than did students working on the same task offline. Similarly, Tidwell and Walther (2002) found that people who communicated with each other via e-mail demonstrated a more direct and intimate relationship and even perceived the interaction to be more effective as compared to those who interacted FTF.

Anonymity also encourages people to join web communities with negative social stigma (McKenna et al., 2002) like those joining people with marginalized sexual interests, psychological and family life problems.

Greater control

Socially inhibited people may often feel lack of control or fear during a typical FTF encounter. This is often not the case in CMC for the following factors that differentiate CMC from FTF communication:

1) Temporal flexibility – everyone can choose when to write an e-mail and take time to answer a question sent through instant messenger. One can also choose between sychronous (instant messaging, chat) and asynchronous (emails, newsgroups) ways of communication.

2) Opportunity to record, review and repair the communication text (e-mail, message, tweet, blog entry) before it is sent or published.These features are likely to enhance people's self-awarenss since writing and reviewing one's text on the screen make one observe themselves as an object, thus creating good conditions for the impression management.

3) Opportunity to leave the communication more easily – in case one does not like the topic/partner one may terminate the interaction (with some polite excuse or just pressing a button) and with no unpleasant social consequences.

4) control over one's appearance – e.g. avatars

CMC is so far mostly text based – communication as document.(see above). This feature can be used to develop people's skills of verbal self-expression, usage of different speech genres, identity presentation and impression maganement by typing (and perceiving others' typed identity)

Irrelevance of geographical distances – it makes no difference whether we chat with our friends who live next door or who live 10 000 km away. The only important thing to keep in mind is often the time difference.

Ease in finding similar others – groups, websites, communities of people with similar interests, worldviews, problems.

Changed states of consciousness – sitting and staring at the computer for a long time and especially „living"/playing games in imaginary worlds may well create a dream-like state of consciousness.

Net democracy – everyone (regardless of gender, age, wealth etc) has the possibility to express her or his ideas and feelings and thus influence others.
Social multitasking – CMC allows us to interact in different ways and with various numbers of people at the same time. For example, at the same time we can

1) write smth on our Facebook wall, tweet or write a blog entry (visible perhaps to hundreds or even thousands of people)
2) chat via instant messenger with many people separately about different topics and maybe using different identities,
3) write a work-related e-mail to our colleague

Dependence of CMC on technology – no matter how sophisticated tools we have, there will always be moments when software or hardware does not work properly, and the connections break. If this happens during personally important conversation or video conference, we experience a lot of stress and anxiety.

Cues to deception

Determinants of liar's behavior

1. Emotions during lying – fear of being caught, anxiety, excitement, guilt, shame, anger
2. Complexity of lies – very often lying is more difficult than telling the truth
3. Attempts of control – liars try to appear truthful and sincere in every way

Verbal characteristics

Statement Validity Assessment (SVA) – a method from forensic psyuchology to evaluate statements

Based on *Undeutsch hypothesis*:

1. Statements that are the product of real experiences will contain characteristics that are generally absent from statements that are he product of imagination (cognitive component)
2. Liars do not wish to say anything that could harm their credibility (motivational component)

More characteristic to truthful statements:

1. logic (they make sense),

2. unstructured narrative
3. details (also include weird, irrelevant details)
4. contextualised
5. recognizable direct speech and threepart interactions
6. misinterpretations of events, details
7. descriptions of people's possible mental states
8. spontaneous corrections of one's statements
9. doubts about one's memory, statements, credibility

These cues are missing in false statements because liars imaginative skills are limited and they do not know, what details are expected. Liars also often have limited knowledge about the topic/situation they have to lie about. They also try to avoid overloading their memory and know that details can be verified and corraborated. And, of course, liars are motivated to make a positive impression.

Linguistic style of deceivers (F2F) is more reticent (includes counterattacks), less involved, they use fewer unique words and more negative statements. More indirect and vague forms of expression are present (e.g., use more second- and third-person pronouns and fewer self-references), and they also use more leveling (or generalizing) terms. Characteristic are also powerless or weaker linguistic forms as a means of distancing or disassociating themselves from message contents and making statements more tentative.
THere are also several promising ideas about the cues of CMClies (Carlson et al, 2004). Thus, CMC lies are supposed to contain more past tense verbs, qualifiers, indefinite pronouns and lack verbal hedges. Liars probably also show excessive use of emoticons, text styling, and certain punctuation (e.g., exclamation points and question marks).Possibilities of previous rehearsal and plan/edit statementsare also important.

Nonverbal characteristics of deception during F2F communication
The are considered Important, because the awareness of one's body language is normally very low. There are also specific automatic associations between

emotions and bodily reactions/nonverbal behaviour, that make nonverbal deceit harder. Another reasoni s that people are more experienced in controlling and changing their speech and it is impossible to be “nonverbally quiet”.

Objective characteristics of nonverbal deception (based on Aldert Vrij’s metaanalysis; Vrij, 2000)

1. Higher voice tone (alas! only some hertzes)
2. More mistakes, hesitations, decreased speed of speech (however, not with simple lies)
3. Longer pauses in speech
4. Decreased movements of feet, fingers (distal body parts)

NOT gaze aversion, nervous laughing and frequent changes in posture, self-manipulations

Facial microexpressions (Paul Ekman, 1992) that last for a 1/15 second are universal but are hard to detect (because of their short duration) are cues in cases when liar is experiencing strong emotions.These microexpressions cannot be faked and suppressed.

The reason why objective (really present) and subjective (cues that people believe to be present in liars’ behaviour) do not coincide is that people remember only liars who’ve been caught, emotional – and when stakes have been high. Some of the subjective cues (gaze) are also easy to control.

Deception in CMC

eHonesty (Feldman, 2009) - truth bias vs awareness that deception on the Internet is (almost) a norm

The only thing we really can know about the people we communicate with is that they have Internet connection…

Robert Feldman’s studies – instant messaging vs Ftf vs e-mails ..and deception

- Deterrent hypothesis – most of the internet communication can be recorded, thus people are less likely to lie;
- Deindividuation hypothesis – internet users lie more because their communication is electronically conveyed not personally (personal detachment)
- Lying is more common via e-mail communication than using instant messengers (because of the asynchronous timing)

Results: all participants lied. Most often it happened in e-mails (depersonalization, detachment ettect being the strongest). Majority of lies were about attitudes, emotions, thoughts – that can't be verified.

Are people anxious during online deception? (Galanxi & Nah, 2007)

- Avatar users' self-reported anxiety level was the lowest – they were as calm as truth-tellers
- Those who were instructed to deceive, chose the least similar avatars

Two kinds of online deception (Hancock, 2007)

- **Message-based deceptions** – based within the content of communication between two or more people

- **Identity based deceptions** ("no one know's you're a dog") - deceptions based on false identity or affiliation

Examples: Alec/Joan, Kaycee Swenson, Salam Pax, "sockpuppeting" on message boards, trolling

Are important part of online impression making

Lies about name, gender, age, nationality, diseases and appearance

Whitty, 2002- analysis on 320 chatrooms: men lie more about gender (28 vs 18%), occupation (56-42), education (40-25) and income (44-28)

Lies about age- men 63%, women 60%

Possible explanations – expression of ideal selves (self-enhancement), our perceptions of ourselves or fitting in.

Nigerian e-mail scam

Most often the victims are compulsive people with high self-esteem or people with altruistic motives.

Romance scam – increasing “popularity”

It is mostly connected to dating sites of every sort and plays on desperate individuals’ need for love. As for the style of the scam, its aim is to create a strong emotional tie; “make a good first impression”. Most frequent targets are middle-aged people in professional jobs and those who are looking for a long-term relationships. Like Nigerian scam, it is usually carried out by groups of people.

Typical scenario: after a few months of courting, money is asked (problems with Nigerian banking system to cash their work cheques) so that foreign lover could come to visit.

Phishing - an attempt to get people to enter their usernames and passwords into a fake website. Begins with mass e-mails asking users to validate their information by logging on to the company’s website.Works because of the source credibility (good phishing sites fool 90% of people), people’s unawareness (passwords are not dangerous, credit card numbers are), people’s lack of knowledge and bounded attention (about website appearances, URLs etc) .

How to prevent CMC deception?

- Increase people’s awareness of the problem and double-scepticism
- Trainings –not “far-mode” but “near-mode“
- Being careful in communicating with strangers

Web-based research

Three types of studies (Skitka & Sagris, 2006):

- Translational - established methods and research questions are adapted to the Web. Internet as a means to data collection.Online versions of questionnaires, polls, experiments. Comparison of the Internet and non-I samples (e.g. Pullmann et al, 2009 about self-esteem)

- Phenomenological - studies are focused more on the specific nature of how Internet use and Internet-based interaction influence people's thoughts, feelings, and behavior

Examples and topics:

1. Classic studies by Robert Kraut et al, 1998 and 2002 about Internet use and social involvement/depression: even though there may be short-term deleterious consequences with Web use, once people have Web access for a while, increased use is associated with greater social support and higher levels of wellbeing over time
2. Identity studies (alternative identities, how these influence people's wellbeing)
3. Blogging, social media – revealed information, sense of community
4. Reasons people engage in online sexual role play and visit adult sites
5. Cyber-ostracism (i.e., social ostracism in online situations)
6. Effectiveness of online support groups, self-help sites and therapies
7. Differences in CMC and F2F communication style

- Novel – methodological innovations unique to Web-based research

not necessarily focused on studying how people use the Internet or the consequences of their Internet use

Examples :

1. Music preferences - Rentfrow & Gosling (2003), a random sample of 500 individuals' online music libraries on Web sites designed for sharing and downloading of music (e.g.,Audiogalaxy.com,Morpheus.com, Napster.com; music preferences were classified as a function of music genre
2. Hitwise, Bill Tancer & "Click"(2008) - analysis of internet searches, peoples interests

<u>Benefits of WWW studies:</u>

- Sampling - one can efficiently recruit large and heterogeneous samples (with respect to age,education, income, social class, nationality). Permits

generalization from college students to a wider variety of participants. It is also possible to reach people with special or rare characteristics.

- Standardized procedures, making studies easy to replicate
- Surveys and experiments can be delivered quickly to participants all over the world 24/7
- Reduced costs - data can be saved automatically in electronic form (reducing costs in lab space,dedicated equipment, paper, mailing costs, and labor); once an experiment or survey is properly programmed, data can be stored in a form ready for analysis, saving costs of data coding and entry (irl an expensive and time-consuming part of the research process)

<u>Most frequent problems</u>

- Multiple submissions - avoidable
    1. Tell people to participate only once; rewards not available for those who participate more than once
    2. Use identifiers (student numbers, phone numbers, email addresses, mailing address, demographics, names)
    3. Filter data to remove repeats
    4. Check for repeated IP addresses; remove records coming from the same or similar IP addresses – but not when data are collected in labs
    5. Allow participation by password only
    6. Filter identical or nearly identical records

- Participant dropout - can cause the observed results to show the opposite of the true effects. In the lab, other people are present, so aperson would have to explain that he or she would like to quit the study and leave early. No such possible social pressure or embarrassment for Web participants

How to avoid?

1. “high-hurdle and warm-up techniques” - to cause those who would drop out of a study to do so before the random assignment to conditions

2. Personal information is asked early (cooperative participants will stick to their decision), includes a page that loads slowly

- Self-selected sample- who will participate and why?

Solutions:

1. Reseach could be conducted by a company that has created a nationally representative panel of Web-enabled households
2. Specify samples you're interested in (specific groups)

- Response bias
    1. The preselected choice should be coded as a nonresponse and given a label such as "choose from this list."
    2. Size of a text box for a numerical answer may also influence the response

- No possibility to explain - experimenter biases are omitted, but people

do not understand instructions similarily. Thus, every aspect of an experiment, including the wording of instructions, must be carefully thought. Take into consideration the variety of people around the world who may have very different interpretations of the instructions

Online groups

People are social animals – we define ourselves in terms of the social connections we form with others and one of the most basic interpersonal needs is to "belong" : to feel that one is a member of a group of others who share similar interests and goals, and to feel that one is a valued (and unique) member of that group (Baumeister & Leary, 1995; Brewer, 1991).

Social networks, chat rooms, newsgroups, electronic mailing lists, message boards, interactive games, and major interactive Web sites provide individuals with the opportunity to join existing online groups or to create their own.

What is group?

John Turner (1982) – perception of membership in some common social identity is sufficient: "*Psychological state of the subjective sense of togetherness, we-ness, or belongingness*" In that sense romantic relationships also fall under the rubric of "group"

More "technical" definition – Muzafer Sherif (1953): A social unit consisting of a number of individuals interacting with each other with respect to: common motives and goals;accepted division of roles, established status relationships; accepted norms and values with reference to matters relevant to the group; development of accepted sanctions (praise and punishment) if and when norms were respected or violated.

How Internet groups fit into those existing definitions?

There are differences btw online and traditional groups – but group functioning and dynamics are quite similar

Norms, values, leaders, influence to members self-concept etc

Specific to online groups:

1. Anonymity, text-basedness, deindividuation – can lead both to greater closeness and intimacy, cohesion, but can also increase aggression
2. Available 24/7 - many virtual groups are always in session, and one can participate at any time of the day or night
3. "we-ness" goes for physical togetherness – *"getting together to chat" , "when I'm in the MUD with my friends"*

Why people choose virtual groups, not traditional?

Individuals join every kind of groups to achieve an important goal or combination of goals: to alleviate loneliness, to gain social support (on issues such as grief or illness), to have important beliefs, attitudes and opinions reinforced to get information

- Lack of "real-world" counterparts (in everyday environment) for people with specialized/unusual/stigmatized interest,esp. when interest/identity "must be" concealed and is embarrassing
- Time constraints - to participate in a group that meets once per week, for

instance, not only must the meeting take place at a time that fits into one's schedule and at a locale that is not too distant, but often other obstacles, such as finding a babysitter, must be first overcome.Members of online support groups frequently find themselves needing support in the middle of the night

- Sharing a common problem, not neighborhood - it may be easier to identify and connect withsimilar others on the Internet than in the relatively narrow real-world social circle in which the individual moves
- Social anxiety and loneliness – offers a possibility to socially anxious people. On the other side, many individuals find themselves in a temporary state of oneliness or in a chronic state of loneliness brought about by situational circumstances.

Social identity & self-concept

The central motivation for identifying with a social group is the gain in self-esteem such identification brings,incorporating the group identity into one's social identity is sufficient to bring about such gains (Tajfel,1982). But there are individual differences in the subjective importance of a particular identity!

- Self-categorization theory (Turner et al 1987) - at different times and in different contexts we see ourselves as unique individuals and at other times as members of our groups
- Self-completion theory (Gollwitzer, 1986) – people strive to make important aspects of their identity into a social reality, to have others notice and validate the identity-important aspects

Specifics of groups:

Individuals with concealable stigmatized identities identify more strongly with Internet groups devoted to stigmatized self-aspects and would thus consider such groups to be more important to their identity than would individuals with mainstream or marginalized–conspicuous problems (i.e., obesity, stuttering).

They also take group members' feedback more seriously

Group norms develop in comparison and differentiation with other groups, and in interaction and negotiation within the group. Internet anonymity can increase

adherence to norms! …but only if salience of the group is high. Norms differ across groups – what is normative behavior for one, is forbidden
in another. THere are also differences about how strictly norms must be followed.

- Explicit norms - moderated chatrooms, newsgroups, interactive websites, listservs. Most of them provide rules nd guidelines like *"abusive language toward another member will not be tolerated" "OT messages are not welcome and repeat violators will be banned from the group"*Most frequently, if the rule is violated first time, only warning follows.
- Implicit norms - not clearly stated, members learn them by observing/reading others' behaviour. *"don't make a general nuisance of yourself","don't disargee with particular respected members of the group if you know whats goodfor you".* Treating violations - first, negative feedback fromother members, then public ostracism, ignoring.

Group leaders

Social identity theory of leadership - individuals who are more prototypical of the group— that is, there is a high degree of overlap between that person's characteristicsand those characteristics of group members (goals, values, attitudes) that distinguish that group from other groups—will emerge as leaders. Applies even more strongly in virtual than in ftf groups because other influential factorsfor leadership, such as the physical appearance and degree of interpersonal dominance of potential leaders, do not matter.

Consequences of virtual group membership

- Greater liking and acceptance by others - in first-time encounters, an individual will be liked better by interaction partner if the encounter takes place in an internet chat room than if the two partners meet ftf instead.This greater liking continued to hold and increased, after the interaction partners met a second time, ftf
- Negating the effects of social anxiety - research has shown that socially anxious individuals are significantly more likely to form friendships and intimate relationshipswith people they meet on the Internet than are those who are not socially anxious
- Decreased feelings of isolation/loneliness - increasing/maintaining one's social network. The Internet not only enables people to maintain and

refresh existing ties with far-flung family members, friends, and social groups, it also enables individuals to create new ties and to have memberships in groups that would otherwise not be available to them.

- “Coming out” and coming together - Self-completion theory - individual is motivated to make new, important aspects of (virtual) identity a social reality by making sure that other people know about them. Large and small real-world gatherings of virtual group members also take place, where members travel across countries and continents to attend “MUD gatherings,” “knitting circles,”etc

Support groups

Emotional support+information about chronic and stigmatizing illnesses (HIV,addictions, prostate cancer), disabilities (e.g. hearing loss)

Stressful life events, problems

Most frequent type – discussion forums.Problematic, because nnt always under the supervision of healthcare professionals. However, writing about personal or emotional issues can positively effect both physical and mental health (Pennebaker 1997, 1999) – people need to create structured, understandable story and that enhances self-awareness.

Possible problems of support groups:

- Members of these groups are more vulnerable to hostility, flaming
- Application of f2f communication expectations
- People disclose too much, forget about recording
- Quality and reliability of available information
- Addiction to support group
- People can be reinforced in their belief that their condition is hopeless or stable, with no improvement possibilities -> fatalism

Hate groups http://www.hatedirectory.com/

Mostly racist or against sexual minorities…gender, nationality, religions

Extremist groups were among the very early users of the Internet (since 1980ies)

They are created for various purposes: to communicate with current members and to recruit new ones; as a forum for publishing group’s views; as an attempt to

“educate” the general public. Some of these educational attempts can be intentionally misleading, e.g. http://www.martinlutherking.org/
Hard to regulate for differe nt countries have different laws; in many countries they are prohibited. USA – First Amendment (protection of freedom of expression)….
Methods – promote protests (not direct violence!), action rallies, sell merchandise. Use divine, (pseudo)scientific justifications, explanations, neutral statements -> make rational and balanced impressions

Children and the Internet

Contradiction - children are often better as concerns new technologies and the Internet...but they are still only kids
Two sides of the Internet

- Communication and entertainment music, videos, games) and informational possibilities
- Pornography, hate, terrorism, sexual solicitation, cyberbullying & harassment -> psychological disorders

About half of the 20 yo and younger people recall learning to use the Internet at 7 years of age or younger.In a 2003 United States survey of parents found that children started looking for Web sites without parental supervision at 4 years of age.
Their interests depend on users’ age: teenagers use the Internet mostly for communication, entertainment & schoolwork.
Web 2.0

Specialized children’s Internet resources provide children with safe and secure access to the Internet like games, learning (Lastekas), children’s e-mail services (KidMail, Surf Buddies) -filter out questionable content and spam. There are also child versions of search programs (Squirrelnet,Yahooligans, Ask Jeeves for Kids) – appropriate content. Use of filtering programs (Net Nanny, Cyber Sitter) limit

children's access to the Internet, filter spam, advertising, and content determined inappropriate for children.

Concerns:

- It is difficult to define spam and inappropriate content, these programs provide very restrictive access to the Internet (e.g. encyclopaedias have "adult content" as well) by passively limiting children's access to possibly unseemly information and resources on the Internet, children may not learn to actively appraise and evaluate Internet information
- Being alone in front of a computer screen --> social isolation, decreased physical activity
- Facing issues kids can't cope with and don't understand – pornography, hate, bullying
- Increased narcissism and violence, decreased intelligence
- Popular culture instead of culture
- Subjective norms and values
- Social development – mixed findings

Gross *et al*. (2002) examined relationships between well-being and closeness of instant message partners in adolescents 11–13 yo. Those who reported feeling comfortable in their social interactions communicated primarily with school friends; adolescents who reported feeling socially isolated also communicated with strangers.

Ybarra *et al*. (2005) - 10–17 yo who reported significant depressive symptoms (e.g., experiencing functional impairments in school, personal hygiene, and/or self-effi cacy) spent more time on the Internet at school and used e-mail more often for social communications than those reporting fewer or no depressive symptoms.

Subrahmanyam *et al*. (2004) analyzed a 30-minute transcript from a teen chat room which included 52 different participants. Topics - sports, sex, and parental concerns The participants openly discussed their feelings and, when a participant expressed a personal concern, the others quickly supported the participant.

Conclusion -the Internet can provide a socially safe environment in which adolescents can discuss embarrassing or taboo topics and practice social

relationships.

Internet-enhanced self-disclosure hypothesis (Valkenberg & Peter, 2009)
Social compensation and rich-get-richer hypotheses:

Effects of unwanted exposure to pornography and hate:
…through innocent or erroneous combinations of multiple meaning keyword searches and through techniques used by distributors to recruit new customers/followers: spam e-mails, invitation to compete for a laptop computer, common-sounding Web domain names http://whitehouse.com http://Disney.com, peer-to-peer file transfers. Very few mention the incident to anyone
No causal link has been firmly established to indicate that viewing pornography—on or off the Internet—has adverse consequences on children or adolescents.